ROCKY FLATS
SOIL DISTURBANCE APPROVAL FORM

LOCATION/PROJECT TITLE/WORK DESCRIPTION DEMOLITION OF BUILDINGS 123, 113, 114, AND 123S

CONTRACTOR: RMRS AUTH./CHARGE NO: FB041005

LOG NO: 87-97-S-18 DRAWFING NO: 5501-0040,

CAUTIONS/SPECIAL INSTRUCTIONS: EXTENSIVE OVERHEAD AND UNDERGROUND UTILITIES. CARE SHOULD BE TAKEN DURING EXCAVATION,

DISTRUBANCE LIMITS (DURATION/BOUNDARY):

RESPONSIBLE JOB SUPERVISOR:

OPERATOR/WORKER(S):

EXCAVATION SPECIALIST DATE

EXCAVATION ENTRY APPROVAL

OSHA SOIL CLASS: A ☐ B ☐ C ☐

INITIAL SAFETY INSPECTION BY: DATE:

DAILY INSPECTIONS:

INITIALS	DATE	INITIALS	DATE	INITIALS	DATE

ADMIN RECORD

B123-A-00009

SOIL DISTURBANCE EVALUATION FORM

The purpose of this information is to assist the Soil Disturbance Committee in identifying the potential hazard (s) associated with this soil disturbance. Return the completed form to the Excavation Specialist in Building 130.

REQUESTER: Name Dorthea Huyt Date 8/7/97

Group RMRS Engineering Phone/Pager 6742/6062

PROJECT TITLE Building 123 Deactivation and Building 113, 114, 123, and 1235 Demolition CHARGE #: FB0410 05

Will the disturbance occur in or near an Individual Hazardous Substance Site (IHSS, formerly SWMU)?

Yes ☒ No ☐

Explain: 148, 121

Will the disturbance interfere with any radiological or other hazard boundary or postings?

Yes ☐ No ☒

Explain:

Are overhead utilities present? Yes ☒ No ☐

Are underground utilities present? Yes ☒ No ☐

Will a utility outage be required? Yes ☒ No ☐

IS THE EXCAVATION FOR:

Construction ☒ Trenching ☐ Sampling ☐ Driven rods/posts ☐

Grounding ☐ Post holes ☐ Other types ☐

IF SAMPLING: NA Soil removal by hand? Yes ☐ No ☐

Drilling? Yes ☐ No ☐

Depth of drilling Diameter

Explain:

IF CONSTRUCTION:

Hand digging only? Yes ☐ No ☒

Will mechanical equipment be required? Yes ☒ No ☐

Describe Type? Excavator

Depth of excavation 8' to 12' for trenches ~1' to 21' for overall site disturbance Length of excavation See attached drawings. Approximately 15'-20' for each of 14 native values.

Width of excavation 4' minimum Will shoring be required Yes

ADDITIONAL COMMENTS:

Reference Specification 02075 for additional information (attached)

Also reference interim drawings 15501-0040-07P, 35000-0004-0SB, 15501-0205-014, and 15501-0126-010.

The Requester shall fill out this form and submit it along with information required in SOIL DISTURBANCE GUIDELINE to the EXCAVATION SPECIALIST.

SITE SURVEY DETERMINATION FOR ENVIRONMENTAL AND WORKER EXPOSURE

Authorization No.: FB041005 Project Manager DORTHEA HOYT

Project Title DEMOLITION OF BUILDINGS 123, 113, 114, AND 123S

Date submitted for determination: AUGUST 12,1997
(Submit site plan and scope of work to committee)

		YES	NO
1.	Review completed of historical data to determine location relative to IHSS/SWMU's or other areas of known contamination that may influence the site. Data may include IHSS/SWMU maps and descriptions of sites, previous documented soil, sediment, or water sampling, and documented radiological surveys.		
	Summary Attached? [signature] Signature 9/11/97 Date Responsibility ER	☒	☐
2.	Sampling ~~plan~~ required to satisfy RFCA ~~IAG,~~ Hazardous Waste Determination, or other requirements for environmental sampling.		
	Summary Attached? [signature] Signature 9/11/97 Date Responsibility ER	☒	☐
3.	Sampling plan required to satisfy Health & Safety requirements for radiological protection.		
	Summary Attached? [signature] Signature 9/24/97 Date ResponsibilityRE/ EC	☒	☐
4.	SAFETY ~~Sampling~~ plan required to satisfy Health & Safety requirements for non-radiological protection.		
	Summary Attached? [signature] Signature Date Responsibility IH	☑	☐
5.	Sampling plan required to satisfy Kaiser-Hill environmental compliance for disposition of soils containing radioactive material above background?		
	Summary Attached? [signature] Signature 10-15-97 Date	☑	☐

KAISER - HILL
COMPANY

INTEROFFICE MEMORANDUM

DATE: October 10, 1997

TO: Dorthea Hoyt, RMRS Engineering, x6742, dp 6062

FROM: Greg Sollner, Compliance and Performance Assurance (C&PA), T130C, X3541

SUBJECT: DISPOSITION OF SOIL EXCAVATED DURING THE ISOLATION OF WATER LINE UTILITIES IN SUPPORT OF THE DEMOLITION OF BUILDINGS 123, 113, 114, AND 123S, AN#FB041005 - GRS-1010-97

Based upon the following; 1) Environmental Assessment (RMRS, ER Projects/Ops Mgmt., September 11, 1997) 2) SSOC Radiological Engineering Report (H.B. Estabrooks, September 24, 1997) 3) discussions with each of these organizations (October 10, 1997) and 4) HRR documentation of operations and releases in and around Building 123, soil in the proposed excavation area may exceed RFCA Tier II levels. Therefore, disposition of the excavated soil must be in accordance with a statistically valid sampling and analysis plan (SAP). Completion of this sampling plan and verification (written) from Radiological Engineering and ER Projects/Ops Management stating the sampling results support a determination that contamination is less than Tier II is required prior to soil put back into the excavation site.

The SAP must consider the potential for both radiological and non-radiological constituents, and shall receive approval from SSOC Radiological Engineering, ER Projects/Ops Mgmt and Kaiser-Hill C&PA and Analytical Services organizations as a minimum.

Analytical results which identify contamination that exceeds the RFCA Attachment 5 Tier II Levels will require remediation and/or management action(s) in accordance with Attachment 5, Section 4.3 and 5.3 as appropriate.

Management of excavated/disturbed soil must be consistent with this written direction. Any deviation from the disposition prescribed herein, shall require an additional evaluation and written direction from KH C&PA. Alternative disposition requests must detail the intended soil management strategy and shall include an analytical/technical basis which is supported by Radiological Engineering.

Safe Sites of Colorado-Radiological Engineering
Soil Disturbance Site Survey/Sampling Report

Authorization Number:	FB041005
Project Manager:	D. Hoyt
Project Title:	B123 Isolation/B113,114,123,123S Demolition
Prepared By:	H. B. Estabrooks, X3769
Rad. Engineering No.:	970924-0426
Date:	September 24, 1997

Scope

This Radiological Survey/Sampling Description applies **only** to the following tasks:

1. B 123 Utility Isolation: Excavation to Underground Lines in Four Locations, Installing Blank Flanges, Removing Valves

2. Demolition of B113, B114, B123, & B123S: Removal of Walls (Including Stem Walls) to the Foundation Slab; Foundation Slab Remaining

Radiological Survey/Sampling Description:

Sampling data (attached) indicate that the soil in the excavation is contaminated with Am 241, Pu 239 and U 238 above background. Soils in the excavation area **are not radiologically contaminated above Tier II Levels**. As such, **no radiological controls are required** for this excavation.

Excavation work for the isolation of B123 will be performed in close proximity to a theorized OPWL (# P-57). Excavation will extend from 5 ft. to 8 ft. below grade. The OPW lines were installed from 3 ft. to 8 ft. deep. **Excavation activities must be conducted with care and scrutiny to prevent contact with the OPWL. If any unexpected underground piping is encountered, or any known OPWL, work shall be stopped and Radiological Engineering contacted, prior to resumption of work.**

Since soils in the excavation area are above background, though, all excavated soils must be dispositioned per K-H Environmental Compliance written direction (Karan North X9876). Soils are contaminated slightly above background, and well below 50% of the Tier II levels.

At the conclusion of activities, excavation equipment shall be surveyed and released in accordance with 4-S23-ROI-03.02

All materials used on this project ,and all waste generated, must be evaluated in accordance with 1-P73-HSP-18.10.

Any deviation from the currently defined scope of work will require the performance of a new evaluation by Radiological Engineering.

If any unusual material/debris or ground water is encountered during this excavation, work must be stopped and Radiological Engineering notified for evaluation prior to continuing.

Safety and Health Assessment for Construction Activities

Authorization No. FB041005
Reviewer: D. Shawn Bradfield K-H Industrial Safety and Hygiene, T452C, X6684
D7459

Date: 9/15/97

Objective:
Excavation of 4 trenches to remove valves and install blank flanges to support building 123 demolition
Safety and Health Requirements:

1. All work will be conducted in accordance with a Site Health and Safety Plan (HASP) 29 CFR 1910.120 or a addendum to a HASP in the form of a Activity Hazard Analyses (AHA). The plan shall adequately address PPE, monitoring and decontamination.

2. In accordance with Section 1700 of the Contract Specifications the minimum construction attire shall include: Coveralls, hard hats, hard toe boots, safety glasses, work gloves.

3. A utility locate and pre-evaluation briefing by the excavation specialists shall be performed prior to intrusive activities.

4. Adequate dust control measures shall be implemented and maintained during excavation activities.

5. The construction crew shall be observant for any unusual conditions (such as: odors, staining, or foreign objects), if any unusual conditions are observed the task shall stop, affected personnel shall move away from the area (upwind), and notify the responsible safety and hygiene department for evaluation and support.

Environmental Assessment For Construction Activities

Authorization No.: FB041005

Reviewer: RMRS, Environmental Remediation Projects/Operations Management , T893B, X4605, D3842

Date: September 11, 1997

OBJECTIVE:

Excavate trenches at four different locations to remove valves and install blank flanges.

ENVIRONMENTAL ASSESSMENT:

The project consists of excavating at four locations to install flanges (see attached figures). Each excavation will be approximately 15 to 20 feet long, four feet wide, and eight to twelve feet deep. The work is in or near IHSSs 121 and 148. It is also in or near PACs 100-601and 100-603 and UBC 123. It is also in Additional Area of Concern #3. IHSS 121 is the Original Process Waste Lines, part of which lie beneath and around Building 123. IHSS 148 was caused by the spill of nitrate bearing waste which might have contained radionuclides. IHSS 148 was partially investigated as part of the OU 13 Remedial Investigation. Process knowledge indicates that metals and radionuclides are present around this building. PAC 100-601was due to a small acid spill. PAC 100-603 was a larger acid spill. These PACs are not a likely source of contamination. Because of a lack of analytical data, the proximity to IHSS 121 and 148, each trench needs to be sampled for metal and VOA screens. UBC 123 is any contamination that might be beneath the building. It is also recommended that radiological surveys be performed in accordance with instructions from SSOC Radiological Engineering. Groundwater is likely to be less than ten feet deep in this area; however, this area is outside the VOC groundwater plume.

A RCRA qualified hazardous waste generator will be identified by the project manager prior to work being performed . RMRS-ER Operations Management will support the project manager and/or waste generator as necessary (Contact N. S. Demos, X4605, D3842). If contaminated soils are excavated then the soils must be properly dispositioned as the responsibility of the requesting organization in accordance with applicable environmental laws and regulations. **The requestor or responsible manager for the activity will be accountable for waste management under RCRA regulations and/or DOE Orders (if applicable) once excavated soils are disturbed (if contaminated). This includes procurement and transportation of containers, filling excavations with clean material, and returning the site to its original condition. Under no circumstances will "any" soil piles be allowed to remain at the site after the project is complete.**

SURFACE WATER DIVISION:

In the likely event that water is encountered during excavation, then work will be stopped immediately. The RMRS Sitewide Surface Water Division (SWD) will be notified and will be responsible for determining if the water requires further sampling. The requestor or project manager will be responsible for the immediate notification to the SWD. **Contact Bill Hayes, X2180.**

NEPA, AIR QUALITY, ECOLOGY, AND WATERSHED DIVISIONS:

The requestor or project manager is responsible for contacting the above organizations as early as possible in the planning stages, and before initiation of field work to ensure compliance with procedure 2-L92-COEM-PMG-302, Overview to Quality, environmental, Davis-Bacon, Security, Safety and Health for Project Managers. **Contact Steve Nesta X6386, D4290.**

Note: There are no sensitive archeological sites associated with this project.